



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/721,176

11/26/2003

Jae Hoon Ha

K-0577

6609

34610 7590 07/13/2007  
KED & ASSOCIATES, LLP  
P.O. Box 221200  
Chantilly, VA 20153-1200

EXAMINER

HUSBAND, SARAH E

ART UNIT

PAPER NUMBER

1746

MAIL DATE

DELIVERY MODE

07/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/721,176	<b>Applicant(s)</b> HA, JAE HOON	
	<b>Examiner</b> Sarah E. Husband	<b>Art Unit</b> 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments, see Remarks, filed 4/17/2007, with respect to the specification have been fully considered and are persuasive. The objection of the specification has been withdrawn.

Applicant's arguments, see Remarks, filed 4/17/2007, with respect to the 112 rejection have been fully considered and are persuasive. In light of the amendments, the 112 rejection of claim 6-11 has been withdrawn.

Applicant's arguments filed 4/17/2007 regarding the 102 rejection have been fully considered but they are not persuasive. Applicant argues that Fumagalli does not disclose the dishwasher including a driver that determines a first position of the valve and turns the valve to a second based on the determined first position. However, this is not persuasive because "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). There is no structural support in the claim language for a driver to accomplish this. Therefore, since Applicant claims a 'driver' and Fumagalli clearly discloses a driver (7), which is controlled by a controller and capable of determining position, Fumagalli anticipates the claimed invention.

Applicant's arguments filed 4/17/2007 regarding the 103 rejection have been fully considered but they are not persuasive. Applicant argues that the driver shown by McDonald is not capable of determining a position of the valve. However, again, this argument is not

persuasive because McDonald shows the same structure (a driver as claimed by Applicant) and would therefore be capable of performing the same function especially since in order for the dishwasher to operate properly, the specific positions of the driver and valves must be known and coordinated based on the specified cycle.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Applicant has amended the claim 14 to include the limitation “a sensor that senses a current position of the valve”. This limitation is not described in the specification and is not present in the drawings. Nowhere does it describe sensing a position of the valve. The “sensing unit” is described as contacting the cam and as a result controlling the motor. The Applicant is not actively sensing the position of the valve.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Fumagalli (EP 0795292).

Fumagalli discloses a dishwasher having a washing chamber (1), top and bottom nozzles (12, 11), a sump (3), pump (4), supply pipe, upper and lower pipes connected to the supply pipe to deliver to top and bottom nozzles (55, 56), a valve (diverter, 6) rotatably installed at the connecting portion between the supply pipe and upper and lower pipes and a motor (7). Fumagalli further discloses the valve has a semi-cylindrical shape with upper and lower ends coupled between the supply pipe (which extends from the pump) and the upper and lower pipes (Fig. 1). Fumagalli also describes fluid flow controlled to the upper and/or lower pipes (col. 5, ll. 50-60).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald (US Patent No. 2,597,359).

McDonald discloses a dishwasher having top and bottom nozzles, sump, pump, supply pipe and upper and lower pipes (Fig. 1, col. 3). McDonald also discloses a valve (52) and driving means (56, 54, 82). McDonald further discloses the valve is semi cylindrical (Fig.

Art Unit: 1746

3) and the motor rotates a rotational shaft (78) connected to the valve, by various electrical functions and connectors (Fig. 5, col. 5, line 60-col. 6, line 30). McDonald further shows a cam (94) which rotates with the valve (col. 6) and having sections of different radius (see Fig. 5) and a sensing unit (96) brought into contact with the cam. Although McDonald doesn't disclose a step motor, a 2rpm motor is disclosed, which have been known to be step motors and also does have a specific rotation, which would suggest a step motor. McDonald also discloses a button (96, 86), which is connected to a switching unit (129) and stops the motor (col. 5-6). The cam radii disclosed by McDonald would also cause the button to compress and restore.

#### ***Allowable Subject Matter***

Claims 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose the dishwasher having a valve, driver, cam and sensing unit which has a button, switch and a lever provided between the cam and button and the lever contacts the outer circumference of the cam and compresses or restores the button based on a portion of the outer circumference of the cam which is contacted by the lever.


#### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah E. Husband whose telephone number is (571) 272-8387. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



MICHAEL BARR  
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEH